

**Amendments to the Specification:**

Please amend the specification as follows:

Please replace the paragraph bridging pages 35 and 36 (page 35, line 24 to page 36, line 5), with the following rewritten paragraph:

As in the seventh embodiment, the optical module of this embodiment can be contained, for example, in an optical module which includes a directly modulated semiconductor layer, which serves as a light source, an externally modulated semiconductor laser, and the like. Consequently, since it is possible to provide dispersive properties for compensating for dispersion in an optical fiber within an optical module, an optical-fiber based optical transmission system can extend the transmission distance without providing a large ~~sized~~ sized dispersion compensator external to the optical module.

Please replace the paragraph bridging pages 39 and 40 (page 39, line 21 to page 40, line 3), with the following rewritten paragraph:

The dispersion measuring device comprises optical demultiplexer 124 for branching an optical signal; light dispersion filter 121 through which one of the optical signals branched by optical demultiplexer 124 passes; first light receiver 122 for generating an electric signal corresponding to the optical signal which has passed through light dispersion filter 121; second light receiver 123 for generating an electric signal corresponding to another optical signal branched to optical demultiplexer 124; and signal differential circuit ~~124~~ 125 for generating the difference between signals generated by first light receiver 122 and second light receiver 123.